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Photograph by Francis C. Fuerst

HALLOWE'EN COMES IN THE SPRING AT IMST

All the grotesque masquerade and rough-and-tumble fun of Hallowe'en are associated with the *Schemenlaufen*, or Festival of Phantoms, held just before Lent at Imst, a mountain town of the Austrian Tyrol. In the costumes of good and evil spirits, the masqueraders enact traditional parts in a boisterous struggle resulting in victory for the good spirits who guard the fertility of fields and promise a good harvest. Only men may participate in this pre-Christian festival. A man wears the woolly wig and warty face of this queen of the witches, the devil's bride. Fanged and cross-eyed witches—some with beards, some with jangling sheep bells around their bodices, some with brooms to tickle the spectators—swarm through the streets of Imst during the festival (Bulletin No. 2).

HOW TEACHERS MAY OBTAIN THE BULLETINS

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United States Befriends Friendly Finland

PURSUING its policy of seeking to bring about friendly settlements wherever European tensions threaten to become belligerent, this month, in a message to the President of the Soviet Union, the United States expressed a hope for a peaceful conclusion of diplomatic conversations between that country and Finland, known to natives as Suomi. There are more than 140,000 native-born Finns and residents of Finnish ancestry in the United States. In this country, however, the north European state is known chiefly for its prompt payments on a debt to the United States.

The loan from the United States was not truly a war debt, since Finland during the World War did not exist as a nation that could incur debts; it was still a part of the crumbling Russian Empire. The money was borrowed to establish the new Finnish national regime set up in 1918, after a successful revolution.

Europe's Great "Reservoir" of Wood

Though one of Europe's dwindling family of war-baby nations, Finland is not small. With the dismemberment of Poland, the "Land of Lakes and Forests" takes its place as the sixth largest country on the continent. It is two-thirds the size of France, three times the size of England; it would rank next to California and Texas in the United States. Throughout Finland's 148,000 square miles, however, the Finns are scattered with semi-pioneer spacing. In no district does the population density exceed one-sixth of that for England, and the country's average is only a twenty-fifth of England's average. One of Finland's big businesses is shipping dairy products from the uncrowded meadows to feed England.

Finland is the world's farthest north nation. It lies within the latitudes of Greenland, which is sheathed in ice. But Finland is covered instead with forests, principally the pine and spruce in international demand for timber, and a smaller quantity of the birch which makes Finland's superior plywood. Trees are the center of the Finns' Midsummer festival, when birch branches festoon all doorways and burning logs float in rafts on Finland's lakes, in a good Viking version of a summer-time Yule-log. With an intricate network of lakes and waterways to float logs to the coast, and sawmilling as a leading industry, Finland can lead all Europe in the export of sawn timber. More than four-fifths of Finland's exports comes from the forests, as lumber, woodpulp, cellulose, paper, plywood, or wood manufactures such as matches, spools, skis, and airplane propellers. To keep from killing the goose that laid the wooden egg, Finland enforces forest conservation, which insures that man shall not cut more than a year's growth can replace.

Hottest Summers in Arctic

The Ice Age has left still fresh footprints in its northward retreat across Finland: lakes, 65,000 of them. They occupy almost a tenth of the area within the country's boundaries. On the southern border between Finland and the Soviet Union stretches broad Ladoga, the largest lake in Europe. Even inland Finns are sailors, skillful in the handling of river boats like giant canoes, a yard wide and 40 to 45 feet long. The farmer, as a rule, is a forester and a fisherman as well, with woods around his land except where water gives him a broader blue horizon.

The forest-farmer is typical of Suomi, where more than three-fourths of the people are rural and only five cities have more than 30,000 inhabitants. Less than a tenth of the land is cultivated, but it yields the thrifty Finn a sufficiency of rye and potatoes, with enough fodder for his livestock. The cattle, in turn, supply

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© *Suomen-Matkat by Aarne Pietienen*

ARTS, CRAFTS, AND LEARNING FIND ROOM IN EVEN A CROWDED FINNISH HOUSEHOLD

The five-stringed *kantele*, played by the lad in the center, has been the distinctive Finnish instrument for two thousand years. For a miniature orchestra, the family has also a violin and a mandolin (on wall, left). The forester's handicraft is displayed in the wooden tub on the table, the wall cabinet beside the clock (right), and perhaps the table and benches as well as the loom. The home loom produces fabrics with stripes of soft, vegetable-dyed colors like that of the grandmother's apron, although printed textiles are imported from England. Electricity has come to supplement light from the broad uncurtained pane at the top of the window, through which the most daylight enters. The fragile geometric creation suspended from the ceiling is a *himmeli*, traditional Christmas decoration made of straw and colored string. With less than one per cent of illiterates, Finns support more than 800 newspapers and periodicals (Bulletin No. 1).

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Hallowe'en Masks: Their Folklore Covers the World

THE death's-head costume of the Hallowe'en masquerader, the bobbing pumpkin face above the sheeted form, the sharp witch's chin of the false face smelling of pasteboard and paint, even the satin harlequin mask with its slant-eyed look of romantic adventure—they are all remote cousins of the Duk-Duk ceremonial headdress used in tribal initiations of the Bismarck Archipelago. The bulging false nose of the Hallowe'en parader down Main Street is not such a far cry from the striped elephant-nose appendage of masked Bassari dancers in French Guinea.

Primitive man used masks to play and pray. A mask was the folk magic that enabled him to invoke a spirit or to evade a spirit, as his needs and fears dictated. Virgil, in the *Georgics*, referred to the Roman custom of hanging masks on trees, to petition the spirits for a plentiful harvest. To hide from an angry spirit, women of northeastern Siberia covered their faces with masks of sedge-grass while inspecting their men's kill; the dead animal might seek revenge.

Fierce Masks Frightened Away Spirits

Today's unbelieving heir to such superstitions may find them more fun to preserve than to discard. The tragic and comic masks of Greek drama continued to live long after the Greek gods and demigods died. The demon-kings of Cambodia's dance dramas, with their three-headed masks rising in tiers of ferocity, have ceased to terrify but have not ceased to please. As soon as the little Sioux boy stopped being frightened at spring thunder's warning of the Thunderbird's approach, he put on a Thunderbird mask and amused himself trying to frighten others; he slapped at the door-flap of his relatives' tents, and adults in mock fear bribed him with gifts to go away.

What beliefs, long since forgotten during the centuries of repetition, first prompted men to don masks at Hallowe'en? Prehistoric Celts of western Europe believed that this fall festival was an unhallowed time, when fairies and witches could cross the elfin boundary into the human world, and the dead could come back. One of man's first reactions, when he imagined the spirit world hovered uncomfortably close, was to put on a mask.

As a counter attack, to frighten away his frighteners, he made his mask as terrifying as possible. Samples from the Congo include a pin-striped mask with long three-cornered nose and a six-sided mouth; a round-eared elephant head with projecting tusks and trunk; a heavy-jawed gorilla face with deep-set slits of eyes. Women of Borneo covered their heads with baskets, with distorted faces of white cloth stitched on the outside.

Indian Kachina Mask, Parrot-Feather Mask, Finger Mask

Before sanitation in the Celebes introduced a better way to fight epidemics, natives combated the devils of disease with frightening mask and noise. They abandoned the village, donned their masks, crept back to the deserted street, and raised a sudden din to startle the spirits away. The Han Emperors of China were protected from harm by devil-chasers wearing bearskin masks, who charged through the palace shooting arrows and throwing red balls at threatening spirits. In Japan, the imperial abode of the Son of Heaven was cleared of evil menaces by four bands of armed warriors, each wearing a mask with four eyes. The Iroquois of North America donned animal skins and masks for a similar spirit-exterminating rite.

All the revelry of Hallowe'en marks the spring festival of seed time in Central Europe, where masqueraders as witches and hobgoblins take on the job of chasing

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butter and cheese, distributed throughout northern European countries largely by co-operative societies. Ninety per cent of the exported butter is marketed through a single co-operative, which is the largest in Finland's forty-year history of co-operative activity.

Like England and other countries that suffered heavily from the World War, Finland has more women than men. Having had the privilege of voting since 1906 (more than two decades in advance of their United States sisters), the women have assumed the responsibility of work which men do in other countries —hod-carrying, brick-laying, lumber-jacking, street-car-conductoring.

Finland's men have been particularly outstanding in athletics, giving their nation a preeminence in sports like that of ancient Greece. Three of the world records set by the Flying Finn, Paavo Nurmi—"the fastest thing on feet"—are still unbroken.

North of the glacier-carved lakes and deep forests stretches Finland's Arctic, where the midnight sun for six weeks makes summer hotter than it is 600 miles south in the capital city, Helsinki. The small Petsamo stretch of Arctic Sea coast, thanks to the widely traveled Gulf Stream, is ice-free, and of great potential value for shipping in case of Baltic Sea hazards due to ice or hostilities.

Note: See also "Farthest North Republic," *National Geographic Magazine*, October 1938; "Flying Around the Baltic," June, 1938; "Where the Sailing Ship Survives" (Aland Islands), January, 1935; and "Helsingfors—A Contrast in Light and Shade," May, 1925.

See also in the GEOGRAPHIC NEWS BULLETINS: "Hobbies and Hard Work in Finland," November 16, 1936; "Aland Islands Plead for Peace," March 30, 1936; and "Finland—Somber Land of Forests and Lakes," January 27, 1936.

Bulletin No. 1, October 30, 1939.

Photograph by Dorothy R. Swift

INCLUDING PIE-SIZE PRETZELS, THE LITTLE TOWN OF JOENSUU HAS BIG-TOWN TRIMMINGS

No titbits are the large pretzels, more sweet than salty, stacked for sale in these two booths. The purchaser's boots have knobs on the toes to hold ski straps in place. The annual fair of Joensuu draws countryfolk from miles around, for this is the only town in the northern half of Carelia, adjoining the Soviet Union. With approximately 6,000 inhabitants, the isolated but thriving little mill town of Joensuu has two parks, three bridges over the Peilisjoki River, several schools, a government granary, and a Town Hall (facing this cobbled Market Square) designed by the renowned Finnish architect Eliel Saarinen, of wide American fame. A statue commemorates Joensuu's local hero, Olli Tiainen, who defied the Russian Tsar.

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China-in-America and a Homeland's Anniversary

THE Dragon Empire of China became a Dragon Republic 28 years ago on October 8, but this year the anniversary found the dragon fighting too hard for great celebration. The Chinese Republic's birthday was observed, however, in the United States, where citizens of Chinese origin gave a day of commemoration to the ancestral homeland which many of them have never seen.

There are more than 75,000 Chinese in the United States. Half of them live in California. The Chinatown of San Francisco, with a population of 16,000 augmented by an additional 3,000 neighbors of the same race in Oakland, is probably the most complete community of its kind beyond the borders of China.

Most Numerous in California's Days of Gold and Railroad Expansion

California was closer to China than to the eastern United States, before railroads shortened coast-to-coast travel time. Chinese coolies were imported in droves by labor contractors to smooth the paths of westward pioneers; a single year brought 40,000. Lured by guarantees of being shipped back to China as wealthy men, dead or alive, they toiled to build the western end of the first transcontinental railroad. Some of them, as cooks or servants, were exotic touches in the homespun communities of the raw, expansive West. The railroad was completed in 1869, and the Chinese population began to dwindle from its peak of 116,000. In 1882 the flow of coolie immigration was stopped by law.

Stories of '49's fabulous successes in California gilded it with bright hopes of wealth, and for the Chinese newcomers the name of America's western coast was Kum Shan, "The Golden Hills." Since San Francisco was the port of entry through which most of the gold-rushers from China reached this gilded land, the port came to be their symbol for all Kum Shan. Today, although San Francisco is also called "No. 1 City," its recognized name among Chinese-speaking Americans is still Kum Shan.

In this Chinese metropolis of the New World and neighboring settlements on the west coast, pioneer conditions still prevail in at least one respect. Since men migrate in advance of women, and migration was stopped before a natural adjustment took place, there are more than four times as many men as women among the population of transplanted China.

Merchants and students predominate among those now entering the country; there are 1,790 Chinese in American colleges, more than one-fourth studying engineering.

Chinatowns Are Large on Coasts Only

Today's Chinese-Americans are no longer working on the railroads. Food and cleanliness are their acknowledged realm. One-fourth of those employed in the United States are at work as owners or employees in small laundries—so small, in fact, that there are only two employees for the average owner. The Chinese trend toward "wash-and-iron" enterprises started in California's gold rush, when white shirts were being shipped to Honolulu for a dose of soap and starch, and home laundries were welcomed as "mutual aid societies." In the Chinese restaurant business, there are 3,000 Chinese dispensing baked duck or water chestnut dishes in New York City alone. A characteristic Sino-American is the importer, whose shop offers damask and jade, carved ivory and lichee nuts, lustrous old porcelain, heavy silk, and delicate filigree jewelry in silver and gold.

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evil spirits away so the crops will thrive. The rowdy Hudel-runners of the northern Tyrol, the Beautiful Perchtens and Ugly Perchtens leaping noisily about Salzburg, the masked processions in parts of Switzerland, the *Schemenlaufen* of Imst are remnants of man's early appeals, through masks, for generosity from Nature (illustration, cover). These pagan jollities, half-tamed by Christianity, time their arrival by the church calendar, as do the Carnival season and the Mardi Gras. A seed time masquerade of goat-masks, traced back to the pagan rites of Dionysius, has been found in the Thracian regions of Greece and in Bulgaria. At Bolivian fiestas, Indians wear masks to finish off costumes which show traces of Incan sun-worship.

The religious masked dance of the Hopi and Zuni Indians may have started as animated picture writing; men in appropriate masks impersonated the god and acted out what he was being asked to do, in a Rain Dance or a Corn Dance. The impersonation was helped by the cylindrical masks of wood or leather, painted with features and furbished with feathers and beads—the kachina masks.

This association of the mask with the supernatural is widespread. Travelers ignorant of their meaning recognize the devil-dances of fierce-masked Tibetan lamas as an appeal to the spirits. Some Brazilian Indians keep their six-foot masks of red parrot feathers in a sacred hut, which no woman may inspect on pain of death. Women, so often excluded from ritual masquerades, among tribes of the Northwest may attend certain ceremonies wearing masks on their fingers.

Note: Additional photographs of masks are found in "When Red Men Ruled Our Forests" (color insert), *National Geographic Magazine*, November, 1937; "Merry Maskers of Imst" (insert of photographs), August, 1936; "Bolivia, Land of Fiestas," November, 1934; "Life Among the Lamas of Choni," November, 1928; "The Enigma of Cambodia" (color insert), September, 1928; and "Carnival Days on the Riviera," October, 1926.

Bulletin No. 2, October 30, 1939.

Photograph by Clifton Adams

DID YOU EVER SEE A NIGHTMARE WALKING?

In Mexico, as everywhere else, pagan festivities have become entangled with the Christian calendar, and Easter has a strong tinge of Hallowe'en with a touch of the Fourth of July. Hallowe'en grotesquerie, with its ever-popular giant masks, lifts its head in the marketplace of Oaxaca during Holy Week, where Zapotec Indians buy papier-maché devils to haunt their fiestas at night. The little long-horn models (right), as well as the giants, are strung with fireworks.

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Mars Gives Tantalizing Hints of Its Geography

MARS left its mark on the Earth last summer, when the orange-red planet came closer than at any time since fifteen years ago. No Martian men invaded the sister world, but Earth astronomers trapped Martian light rays that had shot through 36 million miles of intervening space in three minutes. The light, caught on photographic plates in observatories all around the world, has given science thousands of little pictures of Mars—small, indistinctly marked discs of light against the background of the night sky. These serve as miniature maps of the planet which is Mother Earth's frigid smaller brother—a globe twice as large as the moon, but so remote as to appear star-size to the naked eye. Study of the new Mars portraits at the Lowell Observatory at Flagstaff, Arizona, is filling in some of the unexplored territory on Mars. Already markings have been interpreted as a new canal leading to a new fertile patch of green land.

Can Men Be Living on Mars?

Mars has always been the most exciting of the eight planets which, with the Earth and the small planetoids, encircle the Sun—the only planets yet discovered among the millions of stars. Superstitious men used to fear its connection with war. They have long applied the war god's name to the tawny planet, in whose light they saw a tinge of blood red, now explained as iron rust.

With the possible exception of Venus, Mars is the only planet on which astronomers believe any form of life as we know it could possibly exist. Scientists have no source of information about this possibility except light that has traveled at least 176 million miles; for Mars, like the other planets, has no starlight of its own, and merely reflects light that reaches it from the sun. Moreover, as Mars travels about 48,000 miles per hour, it sometimes gets 248 million miles away and becomes invisible.

Just what are living conditions on Mars? Is it possible that there can be men or other living creatures there? Astronomers already can answer some of these questions. They feel that any higher forms of life on Mars are extremely unlikely because conditions are very unfavorable.

Cold Martian Night Has Two Moons

The sharp eyes of modern astronomical instruments have revealed Mars as a strikingly Earthlike globe, with polar caps of melting ice, with dust storms and drifting clouds, with zones of ripening vegetation shifting as the seasons change. But the differences are even more striking. The Martian night is strange and lively with two moons, moving apparently in opposite directions. The atmosphere is thin and dry. Winter and summer are crammed into every Martian day, with nightly temperature drops of 80 to 100 degrees. Vast areas of the surface appear to be deserts of reddish sand or soil in which iron has rusted. Water is very scarce. The temperature, even at high noon in mid-summer, seldom rises above 60 degrees Fahrenheit. A man from Earth, visiting Mars, would suffocate, for the air of Mars contains only 1/1,000 as much oxygen as our own.

The changing seasons give science the best indication that there may be life on Mars in the form of vegetation. Large areas in the tropical zones begin to turn a greenish-blue color in the spring. The color becomes more pronounced in the summer, then turns yellow and fades in the autumn.

Most interesting of all the features of Mars, however, are the strange mark-

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Canton, where almost a million inhabitants live in teeming congestion, is home town of most Chinese immigrants to the United States. In their adopted country, too, they have settled in metropolises. Almost nine-tenths of the American Chinese are city-dwellers. Japanese in the United States, who are almost twice as numerous as Chinese, are on the other hand evenly divided between city and country.

Eight large metropolitan areas contain the bulk of the Chinese population. Next to the impressive concentration in the San Francisco Bay cities, New York City has the largest Chinese colony. Los Angeles and Chicago rank next. Philadelphia, Boston, Portland (Oregon), and Seattle have over a thousand each.

Chicago, Cleveland, St. Louis, and Detroit are the only cities which have lured large settlements of Chinese far inland. Chicago has over two thousand, while the others have only several hundred. Newark, Baltimore, and San Diego, with their coastal locations, are less surprising with their four to six hundred Chinese inhabitants. The small Chinatown of the Nation's capital is about the same size.

A score of large American cities list only a hundred or two Chinese. The expatriates thrive best in large communities of their fellow countrymen. There are cities of more than 100,000 inhabitants, however, which have reported to the census taker that China is represented by a hardy band of possibly ten or even six.

Bulletin No. 3, October 30, 1939.

Courtesy American Telephone and Telegraph Company

CHINATOWN TEACHES THE MODERN TELEPHONE AN ANCIENT SPEECH

The Chinese are San Francisco's most energetic telephone users, preferring a long-distance call in their own language to a telegram that would have to be in English. The proportion of subscribers in Chinatown, approximately one in six, is higher than that for the rest of San Francisco. On a yearly concession from an American telephone company, the Chinese company has its own directory, in Chinese, and its own exchange, in a pagoda-shaped building just off Grant Avenue. Holes on the switchboard are numbered, as on other telephone switchboards, and every subscriber has a telephone number; but the Chinese prefer to call their friends by name, and the operators give the right number from memory. Among the other special facilities of the Chinese in San Francisco are five daily newspapers in their own language, which circulate to other Chinese expatriates within a radius of 2,000 miles.

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Luxembourg, Small Oasis of Neutrality

THE last of the independent Grand Duchies of Europe, Luxembourg, is pondering the low cost of living and the high cost of war. While neighboring countries are rationing food obtainable only at wartime prices, the neutral duchy has found that the harvest season brings them a reduction of price in some foods.

Besides being an oasis of neutrality between France and Germany, with a third boundary in common with mobilized Belgium, Luxembourg is also a land of no unemployment, no illiteracy, no high taxes, no navy, a midget army, and a balanced budget. Its share of the rich Lorraine iron ore deposits, contained within the duchy's borders, is the basis for an iron and steel industry producing as much as the entire industrialized country of Belgium (nearly twelve times as large and twenty-seven times as populous). As a result, even during the world-wide depression, a levy on steel has helped the little state's income exceed its expenses.

Token Headquarters for Large Foreign Companies

Luxembourg is an "international Delaware" in the number of giant holding companies maintaining "token" headquarters there to avoid high taxes elsewhere. Several hundred organizations controlling business and investments throughout Europe and in the United States make their annual reports under the stamp of a Luxembourg notary public.

The tiny country is ruled over by the Grand Duchess Charlotte. She succeeded her sister Marie Adelaide, who abdicated in 1919. The popularity of the reigning duchess was shown when a general election gave her 66,811 votes as against 16,885 for a republican form of government. In the capital city (also named Luxembourg), the grand duchess resides with her husband and six children in a walled stone palace of Spanish-Renaissance design, built in 1572. On the outer walls are relics of past ages and many historic inscriptions; in the grand salons within are full-length portraits in oil of the grand dukes of past centuries, and historic old tapestries of scenes from the Odyssey.

Centuries of Storm and Stress

Long known as the inland Gibraltar of the North, the capital city occupied a strongly fortified elevation, but as a buffer state the duchy was for many centuries a vast battlefield, and was at one time or another during the past thousand years under the control of nearly every one of the western European nations. The fortifications of the capital were finally razed in 1867 in accordance with a treaty between France and Prussia, the latter having occupied the garrison. Disarmed and relying on the peaceful guarantees of the powers, Luxembourg could offer no resistance when the German army, in 1914, crossed over to the French border, and occupied the little duchy throughout the war in violation of neutrality pledges.

Luxembourg, with only 999 square miles, is much smaller than the State of Rhode Island and has a population of nearly 300,000 contented and fairly prosperous people. In the midst of world-wide depression, every one in Luxembourg was employed, either in agriculture, mining, iron or related industries.

Luxembourg is rich in folklore and fairy tales. Here one may find a Christian altar superimposed on a pagan altar to Hercules, Apollo, Juno, or Minerva. The people are deeply religious and maintain their ancient customs, pilgrimages to miracle-working shrines, and religious processions.

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ings which are known as "canals." Whether they actually are canals or not, nobody knows. The first astronomer who saw them was an Italian, Schiaparelli. He called them *canali*, Italian for "channels," which can also be translated as "canals." They appear as long, narrow lines, too straight to be natural streams. Some are as much as 1,500 miles in length.

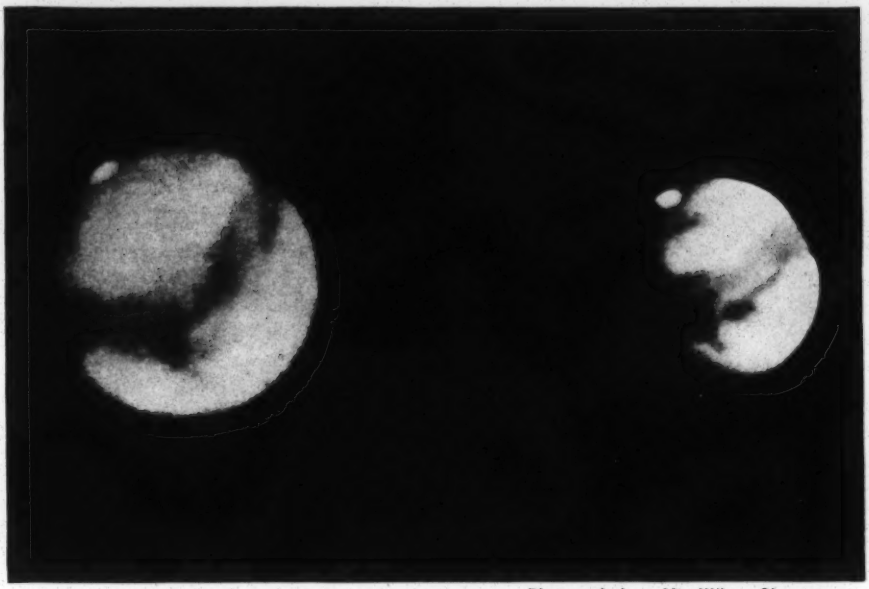
The late Dr. Percival Lowell, astronomer noted for his studies of Mars, believed the lines to be bands of vegetation alongside canals dug by intelligent inhabitants of Mars to bring water down from the melting polar ice caps to fertilize the deserts. The vegetation outlines the canals and helps make them visible. The strips of green bordering the Nile River through the Egyptian desert might appear much the same as an Earth "canal" if viewed from Mars. Few other astronomers agreed with Dr. Lowell, but some think that the markings might represent vegetation along the banks of natural streams.

Dr. Lowell pictured Mars as a planet that is gradually drying up, while its inhabitants struggle to keep alive by irrigating their fields. There are no signs of oceans or lakes, only deserts. The polar caps, though extensive in winter, may be only a few inches thick, containing little water in a frozen state.

Note: See also "News of the Universe," *National Geographic Magazine*, July, 1939; "Interviewing the Stars," January, 1925; and "Exploring the Glories of the Firmament," August, 1919.

Among the ten paintings illustrating "News of the Universe" is a full-page picture of Mars as seen from its larger moon, Phobos.

Bulletin No. 4, October 30, 1939.



Photograph from Mt. Wilson Observatory

IN SPRING WEATHER, MARS DOFFS ITS WHITE CAP

The photograph on the right, taken a month later than that on the left, shows how the planet appears to shrink as it recedes from the Earth. The seeming irregularities in its globular shape are caused by the blending of dark surface areas with the background of night. The shadowy patches are blue-green areas which cover about a third of the surface; they were originally named as seas and lakes, but their gradual change to autumn shades as winter sweeps from the Pole toward the Equator has suggested that they are vegetation instead of water. Mars is inclined on its axis much as the Earth is, and its white polar cap appears to be askew. Two or three times as large in winter, the cap is disappearing as spring brings a touch of green to the surrounding areas. This is the South Pole, reversed to a northern position by the telescope through which the photographs were made. Mars will not come near the Earth again until 1955.

About one-third of the population is engaged in farming 450,000 acres of oats, potatoes, wheat, flax, hemp and rape seed. The land is made increasingly productive by scientific farming. Luxembourg's agriculture schools are attended by students from other countries. The vineyards in a good season will produce 1,250,000 gallons of wine. Stock raising is important and profitable, the Luxembourgers constantly improving their strains by the importation of better breeds of cattle and horses from Belgium and goats from Switzerland.

Among the industries, iron is most important; 35 blast furnaces employ nearly 3,000 workers, while 2,000 more work in seven steel mills.

The duchy is visited by comparatively few foreign travelers. The name "Luxembourg" to the average tourist suggests only the palace and gardens in the Latin quarter of Paris. This was once the Paris home of the Luxembourg dukes.

Note: Luxembourg is described also in "The Grand Duchy of Luxembourg," *National Geographic Magazine*, November, 1924; and in the GEOGRAPHIC NEWS BULLETINS: "Luxembourg: 999 Square Miles of Prosperous Arcadia," April 6, 1936.

See also the Map of Central Europe and the Mediterranean, issued as a supplement to the October, 1939, issue of the *National Geographic Magazine*. Separate unfolded copies may be obtained at 50c (paper) and 75c (linen).

Bulletin No. 5, October 30, 1939.

Photograph by Maynard Owen Williams

VINEYARDS HELP BALANCE THE BUDGET IN "LUTZEL"-BOURG

The name Luxembourg developed from "Lutzel," or "Little," Bourg. The little country is greatly admired by larger nations for its balanced budget, thanks mainly to a tax on the quantities of steel manufactured for sale in neighboring countries. One other source of government income is a tax on wines. Ten or twelve well-known varieties are made from the vineyards on slopes of Luxembourg hillsides, including a Moselle from the valley of that river which the duchy shares with Germany. The girl carries vitriol from the barrel into the vineyards to men who spray it on the vines. The straw, in bundles lying beside the barrel, is moistened and used to tie the vines to poles.

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